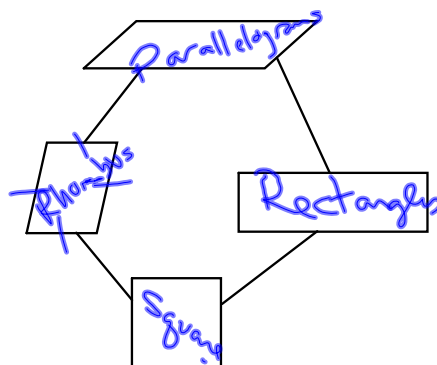
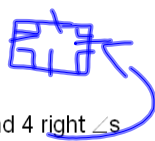
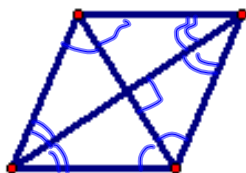


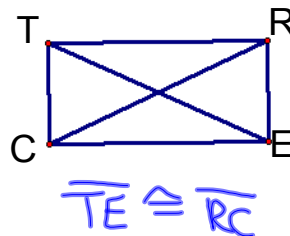
6.4 Rhombuses, Rectangles, and Squares

Rhombus—a parallelogram with 4 \cong sidesRectangle—a parallelogram with 4 right \angle sSquare—a parallelogram with 4 \cong sides and 4 right \angle s

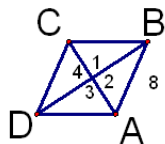
Rhombus

Theorem 6.10—The diagonals of a rhombus are \perp and they bisect the angles.

Rectangle

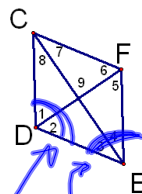
Theorem 6.11—The diagonals of a rectangle are \cong .

Rhombus ABCD



$$\begin{aligned} m\angle 1 &= 90 \\ m\angle 2 &= 90 \\ m\angle 3 &= 90 \\ m\angle 4 &= 90 \\ BC &= 8 \\ AD &= 8 \\ CD &= 8 \end{aligned}$$

Rhombus CDEF

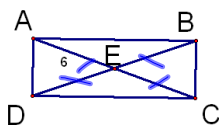


$$m\angle DEF = 66^\circ$$

$$\begin{array}{r} 180 \\ - 66 \\ \hline 114 \end{array} \div 2 = 57$$

$$\begin{aligned} m\angle 1 &= 57 \\ m\angle 2 &= 57 \\ m\angle 3 &= 33 \\ m\angle 4 &= 33 \\ m\angle 5 &= 57 \\ m\angle 6 &= 57 \\ m\angle 7 &= 33 \\ m\angle 8 &= 33 \\ m\angle 9 &= 90 \end{aligned}$$

Rectangle ABCD



$$EC = 6$$

$$BE = 6$$

$$ED = 6$$

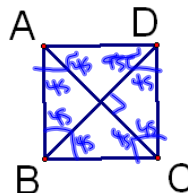
$$BD = 12$$

$$m\angle ABC = 90$$

$$m\angle BCD = 90$$

Square ABCD

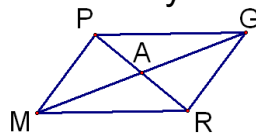
Fill in the missing angles.



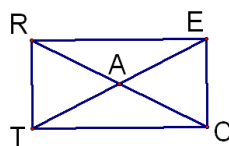
List all of the properties that must be true for the given quadrilateral:

- all sides are \cong
- all angles are \cong
- diagonals are \cong
- opposite angles are \cong
- opposite sides are \cong
- consecutive angles are supplementary
- diagonals bisect each other
- opposite sides are parallel
- diagonals are perpendicular and bisect the angles

Summary

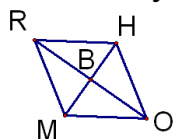


Parallelogram

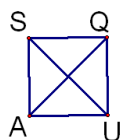


Rectangle

Summary



Rhombus



Square

Homework

p. 328-329

#s 1-12, ~~14-20~~